This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-18(Canceled).

Claim 19(Currently Amended). A method of producing short-wavelength electromagnetic emissions comprising:

providing a target comprising a metallic compound solution in a target zone, wherein the metallic compound solution comprises a metallic suspension having nano-size particles;

irradiating the target with a high-energy source to form a plasma that generates electromagnetic emissions~~;~~.

Claim 20(Previously Presented). A method according to claim 19 wherein the target comprises a metallic compound dissolved in a solvent.

Claim 21(Previously Presented). A method according to claim 19 wherein providing a target comprises forming droplets of the metallic compound solution.

Claim 22(Currently Amended). A method according to claim 19 wherein the average target size is in the range of about 10 microns to about 100 microns.

Claim 23(Currently Amended). A method according to claim 19 wherein the step of providing a target is performed at a temperature in the range of about 10 degrees C to about 30 degrees C.

Claim 24(Previously Presented). A method according to claim 19 wherein the high-energy source is a laser.

Claim 25(Currently Amended). A method according to claim 24 wherein the laser produces ~~a~~ laser beams having a diameter in the target zone that is substantially identical to the average target size.

Claim 26(Previously Presented). A method according to claim 19 wherein the target comprises a metallic salt and a solvent.

Claim 27(Previously Presented). A method according to claim 19 wherein the target comprises a metallic chloride and a solvent.

Claim 28(Previously Presented). A method according to claim 27 wherein the metallic chloride is selected from the group consisting of zinc chloride, copper chloride, tin chloride, and aluminum chloride.

Claim 29(Previously Presented). A method according to claim 19 wherein the target comprises a metallic bromide and a solvent.

Claim 30(Previously Presented). A method according to claim 29 wherein the metallic bromide is selected from the group consisting of zinc bromide, copper bromide, and tin bromide.

Claim 31(Previously Presented). A method according to claim 19 wherein wherein the target comprises a metallic sulfate and a solvent.

Claim 32(Previously Presented). A method according to claim 31 wherein the metallic sulfate is selected from the group consisting of zinc sulfate, copper sulfate, and tin sulfate.

Claim 33(Previously Presented). A method according to claim 19 wherein the target comprises a metallic nitrate and a solvent.

Claim 34(Previously Presented). A method according to claim 33 wherein the metallic nitrate is selected from the group consisting of zinc nitrate, copper nitrate, and tin nitrate.

Claim 35(Previously Presented). A method according to claim 19 wherein the target comprises an organo-metallic compound and a solvent.

Claim 36(Previously Presented). A method according to claim 35 wherein the organo-metallic compound is selected from the group consisting of bromoform, diodomethane, selenium dioxide, and zinc dibromide.

Claim 37(Previously Presented). A method according to claim 19 wherein the short wavelength electromagnetic emissions have a wavelength of about 11 nanometers.

Claim 38(Previously Presented). A method according to claim 19 wherein the short-wavelength electromagnetic emissions have a wavelength of about 13 nanometers.

Claim 39(Currently Amended). A system for producing short-wavelength electromagnetic emissions comprising:

a vacuum chamber;

a target dispenser connected to the vacuum chamber and configured to dispense targets comprising a metallic compound solution into a target zone, wherein the metallic compound solution comprises a metallic suspension having nano-size particles; and

a focusing device in fixed relation to the target ~~chamber~~zone, wherein the focusing device is operable to focus a high energy source onto the target zone, and wherein the system is operable to provide the targets in a temperature range from about 10 degrees centigrade to about 30 degrees centigrade.

Claim 40(Previously Presented). A system according to claim 39, further comprising a precision adjustment unit coupled with the target dispenser, wherein the precision

adjustment unit is operable to adjust a position of the target zone in three orthogonal dimensions.

Claim 41(Previously Presented). A system according to claim 39, further comprising a collector mirror disposed in the vacuum chamber and operable to reflect the short wavelength electromagnetic emissions.

Claim 42(Previously Presented). A system according to claim 39, further comprising a cryogenic trap disposed in the vacuum chamber and operable to collect targets that are not irradiated by the high energy source.

Claim 43(Previously Presented). A system according to claim 39 wherein the focusing device is a lens.

Claim 44(Currently Amended). A system according to claim 39 wherein the average target size is in the range of about 10 microns to about 100 microns.

Claim 45(Previously Presented). A system according to claim 39 wherein the high energy source is a laser.

Claim 46(Previously Presented). A system according to claim 45 wherein the laser is configured to produce a laser beam having a diameter in the target zone that is substantially identical to the average target size.

Claim 47(Canceled).

Claim 48(New). A system for producing short-wavelength electromagnetic emissions comprising:

a vacuum chamber;

a target dispenser connected to the vacuum chamber and configured to dispense targets comprising a metallic compound solution into a target zone, wherein the metallic compound solution comprises a metallic suspension having nano-size particles; and

a focusing device in fixed relation to the target zone, wherein the focusing device is operable to focus a high energy source onto the target zone; and

a precision adjustment unit coupled with the target dispenser, wherein the precision adjustment unit is operable to adjust a position of the target zone in three orthogonal dimensions